CLASSIC™ 832 In-Line Flanged

- Flanged Process Connections
- For inline mounting
- Exotic Alloys, Custom Lengths and Remote Mounted Electronics Available
- Digital Microprocessor Technology - Settings configurable by user for Flow, Level, Interface & Temperature Sensing
- No Jumpers - All Configurable Options are stored in Non-Volatile Memory
- FM Explosion-proof Class I, Div. 1, Groups B, C & D
- CSA/ANSI UL Flameproof Class I, Div. 1, Groups B, C & D

Display Panel & Intelligent User Interface

The KAYDEN CLASSIC 800 Series Electronics Module is designed for quick and easy setup.

All CLASSIC 800 models, regardless of the type of sensor, use the same Electronics Module.

Display Panel Indicators:
- Relay 1 & 2  Set Point 1 & 2
- Fault Alarm
- Run Mode
- Start-up Bypass Timer (for pump control)
- LED Bar Graph for Flow Rate, Level or Interface Indication

Configuration Mode Features:
- Adjustable Sensitivity
- Zero & Span Adjustment
- Modbus Addressable

Electronics Modules Feature:
- Easy setup; no jumpers or trim pots
- Continuous Self-test Diagnostics with Fault Indicator
- Temperature Compensation

Applications:
- Universal Power 12-24 VDC & 115-230 VAC standard
- Two SPDT Relays - independently adjustable
- 4-20 mA Analog Output
- “Smart Heater” function for power economy and increased heater life
- Start-up Bypass Timer (for pump control)
**CLASSIC™ 832 InLine Flanged**

**Sensor Type**
- R: -45°C to +200°C (-50°F to +392°F) Continuous Service

**Sensor Material**
- A: 316/316L Stainless Steel c/w Nickel Brazed

**Process Connection - Flange Type**
- A: Raised Face
- B: RTJ - Ring Type Joint

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**Sensor Assembly Body Length (Flange Face to Flange Face)**
- Custom Body Lengths: Available in 1/2" (1.0 cm) increments. eg. 16.0" = 0160 ("M" = cm)
- 7" - 72" (relative to flange size/rating)

**Bleed Port**
- A: 1/4" Threaded - Standard

**Sensor Orientation**
- H: Horizontal
- V: Vertical

**Pipe Schedule**
- 0: Schedule 40
- 1: Schedule 80 (Standard)

**Input Power**
- C: 12-24 VDC and 115-230 VAC, 50 to 60 Hz

**Electronics**
- Microprocessor Controlled with User Interface. Two SPDT sealed relay contacts. Modbus via RS-485. 4-20 mA current loop.

**Local Enclosure**
- 1: Flameproof - Aluminum

**Cover - For Local Enclosure / Sensor Enclosure**
- B: Blind Cover - Flameproof
- G: Glass Lens Cover - Flameproof

**Remote Electronics Enclosure & Cover**
- 0A: Not Required
- 1B: Blind Cover - Flameproof
- 1G: Glass Lens Cover - Flameproof

**Agency Approvals**
- 1: UL & CSA
- 9: FM

**Language**
- E: English

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Model Number Legend
DOC#: ML-832-004
ML-832-004-[009]
This is a Controlled Document and cannot be changed without the Approval of the Quality Control Manager.
Applications:
- Flow, Level, Interface & Temperature

Enclosure Material:
- Copper-free Aluminum (does not exceed 0.4% copper)
- Powder Coated Polyester TGIC (polyester triglycidyl isocyanurate)
- NEMA 4X / Type 4 / IP55
- 1” FNPT Conduit Connection
- Buna O-ring on Cover

Temperature Range - Continuous Service:
- Sensors:
  - -45°C to +200°C (-50°F to +392°F)
  - (Models 814 & 816: -45°C to +160°C [-50°F to +320°F])
- Electronics:
  - -55°C to +65°C (-67°F to +149°F)
  - Note: For temperatures above +65°C (+149°F) electronics must be remotely mounted.

Operating Pressure - Sensor:
- Threaded Style:
  - Maximum Working Pressure: 24 MPa (3500 psig) dependent on model and material of construction
- Flanged Style:
  - Maximum Working Pressure: per flange rating
- Sanitary Tri-Clamp Style:
  - Maximum Working Pressure: per flange rating

Switch / Transmitter Switch Point Range (Insertion Style - 1/2” to 2”MNPT, Flanged):
- Water-based Liquids:
  - 0.01 to 3.0 ft./sec. (0.003 to 0.9 meters/sec.)
- Hydrocarbon-based Liquids:
  - 0.01 to 5.0 ft./sec. (0.003 to 1.5 meters/sec.)
- Gases:
  - 0.25 to 254 sfps (0.076 to 77 smps)

Switch / Transmitter Switch Point Range (InLine Style):
- Water-based Liquids:
  - 0.015 to 50 cc/sec.
- Hydrocarbon-based Liquids:
  - 0.033 to 110 cc/sec.
- Gases:
  - 0.6 to 20,000 cc/sec.

Accuracy:
- Flow Service:
  - ±1% set point velocity over operating range of ±28°C (±50°F)
- Level Service:
  - ±0.25 inches (±0.64 cm)
CLASSIC™ 800 Specifications

Response Time:
- Approximately 0.5 to 30 seconds

Remote Electronics Option:
- Maximum recommended cable length - 200 feet (60 m)
- Cable type - 24 AWG minimum - twisted pairs

Heater Power:
- Field adjustable to optimize performance

Input Power:
- Universal Power standard 12-24 VDC and 115-230 VAC, 50-60 Hz
- Consumption: Maximum: 6.0 watts (fully configured)

Outputs:
- 4-20 mA current loop
- Two (2) independent SPDT sealed relay contacts rated @ 4 amps resistive 230 VAC or 30 VDC Max.; individually adjustable

Start-Up Bypass Timer:
- Adjustable for 0 to 100 seconds

Communications:
- Modbus via RS-485

RCMS (Remote Control & Monitoring Software) Functions and Features:
- Display Panel Lock-Out
- Set Points configuration
- Relay Actuation Delay Timer
  - Independently configurable for both On and Off, increasing or decreasing
  - Adjustable from 0 - 5,000 seconds
- Start-up Bypass Timer
  - Adjustable from 0 - 100 seconds
- Relay Mode Configuration
  - Energized above or below set point
- Relay Temperature Mode Configuration
- Heater Power setting
- Zero and Span settings
- Analog (4-20 mA) output configuration
- View and Print Graphing (Trend) function
- Configuring settings; write to device, save to file and print
- Fault Event Log

Note: Also configurable from Display Panel

Diagnostics:
- Primary watchdog circuit monitors microprocessor parameter anomalies
- Secondary watchdog circuit monitors microprocessor health
- Heater monitored for out-of-range conditions
- Fault Mode de-energizes relay(s) and halts power to the heater

Agency Approvals:
- **CSA - ANSI/UL**
  - Class I, Div. 1, Groups B, C and D; Ex d IIB + H2; AEx d IIB+H2
  - Class I, Zone 1, Group IIB + H2;
  - Enclosure Type 4 / IP55
- **Single Seal Approval**
  - Per ANSI/ISA 12.27.01-2003
- **CRN**
  - Canadian Registration Number
  - Note: CRN approvals available. Visit telematic.com for CRN information per model and jurisdiction.
- **FM Approvals**
  - Class I, Div. 1, Groups B, C and D;
  - Class I, Zone 1, AEx d IIB + H2;
  - T2D (Ta=75°C); T3 (Ta=65°C);
  - Enclosure Type 4 / IP55

Weights and Dimensions:
- 810 Threaded: 2” U length - 7 lbs (3.18 kg)
- Carton Size - 15” x 5” x 6” (38 cm x 13 cm x 15 cm)
- Other models/sizes - consult Telematic

Warranty:
- One (1) Year from shipment date from factory (see Terms & Conditions on telematic.com for details)